273-284; and Dr. Mordtmann has gone still further into the question and has I think satisfactorily deciphered the rude Pehlevi inscription which appears on the reverse of some of them. I produce for exhibition to the meeting a specimen of the earliest class from my own collection (Plate X, No. 7). Of the second class which have lately become exceedingly common I possess a considerable quantity in England, including the unique gold coin figured in the plate accompanying Mr. Head's paper (Pl. XIII, Nos. 4, 5-16).* Specimens of the third and most interesting class are still comparatively rare. The two coins of Kariba-êl are the first of this class which have been exhibited before any English Society. In addition to these, I produce a coin of Yada'- ab Yenaf, struck at Harb (Caripeta of Pliny?) (Plate X, No. 3), and three of another king, 'Umdan Yehaqbadh, struck at Raidân (Plate X, Nos. 4, 5, 6). There are a few other specimens in the British Museum, and Dr. Mordtmann also possesses two examples of Kariba-êl and a few others which are described in the paper to which I have adverted. The indigenous silver coinage of El-Yemen appears to have been succeeded by the gold and copper mintages of the Axumite kings of Abyssinia, who are supposed to have secured a footing in South Arabia towards the close of the 1st century A. D. It will be seen from the specimen which I produce before the meeting (Plate X, No. 8) that these monarchs were to a certain extent indebted to their Himyaritic predecessors for the types of their coins, which it is probable were current in South Arabia until the conversion of that part of the peninsula to Islam.

On the Revenues of the Mughul Empire.—By H. G. KEENE, C. S. AKBAR'S REVENUE.

The Journal of the Asiatic Society of Bengal, Part I, No. IV, 1880, contained a paper by Mr. C. J. Rodgers on the Copper Coins of Akbar. The writer, a practical numismatist well known in Upper India, laid down as a principle that it must have been a necessity of the position of the Emperor Akbar, "when he made a demand from his ministers for revenue returns," to fix upon a standard. He gives us the description of a coin called the "yak tánka," weighing 59 grains Troy; and he concludes that the 640 krors of "morádi tankas" of Nizam-ud-din Ahmad, about which we have heard so much, must be based on the standard of two hundred to the rupee and be equal to three million two hundred thousand sterling a year. He adds that Abul Fazl's estimate of the revenue of the same period in dáms will be equivalent to about the same, or three million five

* Dr. Schlumberger (*Le Trésor de San'â*, p. 6, note 2) suggests that this is the same coin as that mentioned by me in the *Transactions of the Soc. of Bibl. Arch.* Vol. II. p. 5, but this is not the case. The coin sent by Capt. Miles to the Royal Asiatic Society from Aden was, I believe, *Axumite*.

hundred and forty thousand. The discrepancy is not fatal, if we suppose Nizam-ud-din to have been giving only the land revenue, while Abul Fazl added the customs. He adds that Thomas's estimates are incredible, and that the subject is one of great importance; in which every one who thinks much about it must agree.

But extreme and conflicting as are Mr. Thomas's amounts, there are numerous difficulties in the substitute suggested by Mr. Rodgers. In the first place there is fair evidence that in the next reign, after Khándes and Gujrát had been absorbed in the empire and Todarmal's settlements had borne their fruit, the revenues ran from twelve millions sterling to about seventeen and a half. The first may be gathered from the statement of Coryat, the wandering Vicar of Odcombe, who was a man of a most inquiring disposition, and who gives the detailed account that the revenue (in the early years of Jahangir) was "forty millions of crownes of six shillings each." The second rests upon the testimony of the Bádsháh námah of a contemporary of Sháhjáhan's who says that on the demise of the crown the revenue was over 18 krors. In the next place, Abul Fazl does not confine his estimate to the 567,63,83,383 dáms erroneously given by Mr. Rodgers: he gives it in Rupees, and he repeats it in detail as the aggregate of what he calls his tagsim Jamas. In the text of the Ain Akbari he says that three Arbs, &c. of dáms were equal to Rs. 90,749,881, annas 2 and pies 5 and the aggregate of the taqsim Jamas, given afterwards, brings the total up, with some customs items, to nearly ten krors (9,96,13,850). Now whatever else is to be discussed, we shall hardly go wrong in supposing that Nizam-ud-din and Abul Fazl both meant the same. Both were financial officers of the highest rank, and, as Mr. Rodgers well says, their estimates are for two succeeding years, the 39th and 40th of the reign. Lastly, there is no sufficient ground for assuming that the dám was worth so little as Mr. Rodgers supposes. He arrives at his conclusion by taking it as being five times the value of a tánka of which 200 went to the rupee; he says truly enough that forty of these dáms were equal to the rupee, vide Blochmann's Ain, p. 31; and hence he infers that this brings out his estimate of 3 krors 54 lakhs. But it does not do so. Abul Fazl, as we have seen, though he preserves the proportion of 40: 1, says that the land revenue in the 40th year was three Arbs, sixty-two krors ninety-seven lakhs, fifty-five thousand one hundred and forty-six dáms, or Rs. 90,749,881 which is the estimate in $d\acute{a}ms$ divided by forty.

Thus, then, we see that Mr. Rodgers' first principle was wrong, and we arrive at a second proposition: not only must Abul Fazl and Nizamud-din mean much the same total, but they express it in different standards. The $tanka^*$ of the one must bear to the ddm of the other some such proportion as that of three hundred and sixty-two to six hundred and forty; or, in

* It will be seen presently that the word is tanka دَنْكُمْ without the alif.

other words the *tanka* of Nizam-ud-din must have been nearly the sixty-fourth of a rupee.

Now it seems to me that the coins figured by Mr. Rodgers furnish an indication of this having been the case. His $d\acute{a}m$ weighs 76 grains; and a rupee, as he tells us, is worth 6400 grains or thereabouts which is, indeed, about the average market value in copper. Supposing his $d\acute{a}m$ to be a little worn it will represent exactly the half of a revenue $d\acute{a}m$ (160 × 40 = 6400) just as the modern "pyce" is half the tanka or "takka" of native accountants. Mr. Rodgers' $t\acute{a}nka$ weighs 59 (say without rubbing 60), which could not possibly have been the tanka, of which five went to the $d\acute{a}m$ (although five times half would be 150, not far from the weight of the $d\acute{a}m$).

The probability, then, is that the *tanka* mentioned by Nizam-ud-din was no real coin, but a copper integer of account used by him from some local or special reason, as the sixty fourth-part of the silver integer, or Rupee.

Now this can he shewn to be otherwise reasonable. The word tankahis given in dictionaries to be (what it still is in native usage) the equivalent of two paisah. There is no positive evidence as to the value of the paisah of those days; the word does not seem to have been established, in its modern sense, till quite recent times. But the Company struck a coin (which they called "yak pai") in the name of the emperor; this coin weighed 100 grains. I have one in my possession which has never been a rubbed; but I need not send it, as the Society can easily procure one for reference; and Mr. Rodgers, in his concluding note, also mentions the same thing. But if this was the standard of the imperial coinage, under whatever name, it is but natural that the "murádi tanka" (which is otherwise so puzzling) should have been the equivalent expression in the days of Akbar. The paisah of those days was the same as the dám (Blochmann's Ain, p. 51.)

In support of my belief that in point of fact the copper *tanka* was an imaginary figure sometimes used in accounting, I would refer to Mr. Thomas (*Chronicles*, p. 49, note). It is not therefore clear on what data the learned author has elsewhere taken the *tankah* of Nizam-ud-din to be the Sikandari *tankah*. If anything is certain, it is that the use of the word "*murádi*" in accounts means that a sum is being expressed in copper. The exact words used by Nizam-ud-din are to be found in the *Tabaqát Akbari*:—

شش صدو چېل کټروز ٿنکهه مىرادى

"*i. e.*, at the present time Hindustan yields a revenue of 640 krors murádi tankahs" (v. Elliot-Dowson, p. 186).

The suggestion that this means ten krors of rupees derives strong confirmation from the following passage in Mr. Thomas's Preface :— "Indian Currency consisted of hybrid pieces of silver and copper combined in the proportions necessary to constitute the equivalent subdivisions of the ruling silver *tankah*, which was never divided in practice by any other number than 64."

After explaining that the instinct of the Indian was to reckon by fours, and that the copper exchange against silver commenced with four *fuls* to the sixty-fourth part of a silver *tankah*, the author adds :—

"The quaternary scale in short was all pervading; there was no escaping the inevitable fours, sixteens, thirty-twos and sixty-fours, the heritage of the masses which, having survived alike Aryan intrusions and Muhammadan conquest, still flourish undisturbed by the presence of British decimals."

The copper integer or "pyce" of the British currency in India is still 64 to the Rupee; but I am not sure that there is in this any thing anti-Aryan. Indeed we have in England the analogy of our *avoirdupois* weight, which still proceeds upon a scale of sixteen, as our "crown" of five shillings is the fourth of the pound sterling. If, however, sixty-four was the necessary divisor for bringing copper *tankahs* into their silver equivalent, it appears almost inevitable that the *murádi tankah* of Nizam-ud-din is the sixty-fourth of the *mubligh* or silver integer, which was the Rupee. And hence the revenue of Akbar in his 39th and 40th years was about ten krors of Rupees.

If not, and we are to take the murádi tankah to mean merely the coin so called, of which (as we learn from the Ain) five went to the dám and two hundred to the Rupee, then Mr. Rodgers would be nearer right. The tanka figured by Mr. Rodgers weighs 59 grains, that mentioned by Nizam-ud-din (which is however differently spelt) would only be half the sixty-fourth (say 50 grains). If these could he taken to coincide, the revenue aggregate given by the latter would have to be halved also. In that case the word "Hindustan" would have to be taken in a more restricted sense, as meaning nothing but the Subahs of Allahabad, Agra, Delhi and Bengal, aggregated by 'Abul Fazl at three krors and forty-three lákhs.' And this, which is the only alternative solution, is equally destructive with the former of Mr. Thomas' excessive estimate, which he attempts to support by doing violence to Abul Fazl's words and figures. Before adopting it however, we must attentively study the text of Nizam-ud-din, and I believe it will be found impossible to suppose that the geographical area of Hindustan could have been intended to be thus restricted. For we are there told that Hindustan measures 1680 kos from the Hindu Kush to the Bay of Bengal and 800 from Kashmir to Baroch: and so measured Hindustan will be found to comprise the whole twelve Subahs of Abul Fazl, assessed, as we learn from his details, at nearly ten krors of Rupees, as well as Khandes and Guzrat, whose assessment is more doubtful.

103

I therefore see no escape from the conclusion that ten *krors* is the right figure; that the estimates of Nizam-ud-din and Abul Fazl agree; and that the *murádi tankah* is neither the one-fifth of a *dám* mentioned in the *Ain* nor the modern "double pyce," but an imaginary integer of copper accounts whereof sixty-four equal one silver Rupee. I conclude, farther, that this sum was increased, by the end of the reign, to about twelve *krors*; that increase being due to good settlements and a firm administration. Of course my conclusion is wholly inconsistent with the complaint of Sir R. Temple (*India in* 1880) that the British get no more out of the empire than the Mughals did. But that is a complaint which would, as I imagine, be endorsed by very few persons who were acquainted with the facts.

On the Identity of Upello with Upaplava.—By RISHI KESH BHATTÁCHÁRYA SHÁSTRÍ.

With reference to a letter which was sent a few days ago by the Deputy Commissioner, Delhi, asking about the site of the city of Upello or (the correct word) Upaplava mentioned in the Virátaparva, Mahábhárata, I beg to submit the following which I hope may throw some light on the subject.

As Sanskrit literature is wholly destitute of trustworthy geographical records, it is not easy, after the lapse of ages, to ascertain precisely the site of several places enumerated in the Puránas. A skilful conjecture only may be made by way of solving the problems of such a nature.

The sloka referred to in the letter is :---

उपसवं समागत्य खान्धावारं प्रविश्व च। पाण्डवानघ तान् सर्व्वान् श्रत्वस्वच ददर्श ह॥

" Salya having arrived at Upaplava entered the camp and saw there all the Pándavas."

Nílakantha in his commentary on this sloka says—उपस्रवं विराटनगरस प्रदेशविशेषम् "Upaplava is a city in the kingdom of Viráta" (Matsyadesa). So the solution of the question solely depends on finding out the site of Matysyadesa or the kingdom of Viráta, a task which is as difficult as may be expected at a time like this when all the geographical names of ancient India have assumed quite different forms.

However, we must try to trace the place by collecting local traditions as well as Pauránika descriptions relating to the subject.

It is a common saying among the people of Midanapur district in Bengal that, the Matsyadesa of ancient times had been situated in the vicinity of that district, while others state that the kingdom of Viráța had